IN THE CLAIMS

Please amend the claims as follows:

Claims 1-19. (Canceled)

Claim 20 (Currently Amended): ~~High-density~~ A high-density fissile material nuclear fuel~~, in a form of an assembly of elementary wires, most of which are constituted by fissile material, wherein said elementary wires are assembled by stranding, braiding, or weaving and said assembly is contained in a stainless ductile casing, which elementary wires are compressed by deformation of said casing, and the elementary wires made of fissile material are fine enough to allow for size accommodation of the fuel under effects of irradiation during burnup and for gaseous fission products to be removed~~ comprising:

a stainless ductile casing; and

an assembly formed of a plurality of wires stranded, braided or weaved together,

wherein the assembly is contained inside the stainless ductile casing and compressed therein by said stainless ductile casing and more than half of the number of wires are constituted by the fissile material.

Claim 21 (Withdrawn and Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 20, wherein ~~the casing is deformed until~~ there are gaps between the ~~elementary~~ wires and those gaps occupy only 3 to 15% of the internal cross-section of the stainless ductile casing ~~after deformation~~.

Claim 22 (Canceled).

Claim 23 (Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 20, wherein the fissile material is selected [[from]] in the group ~~including~~ constituted by uranium, plutonium, americium, ~~their~~ alloys thereof and blends of alloys thereof~~or a combination of several of these elements~~.

Claim 24 (Withdrawn and Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 23, wherein ~~said alloys are~~ the fissile material is selected [[from]] in the group ~~including~~ constituted by $UMo_x$ [[and]] UAl and alloys thereof.

Claim 25 (Withdrawn and Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 24, wherein the fissile material is a UMo alloy comprising ~~around~~ 8% by mass of molybdenum.

Claim 26 (Withdrawn and Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 20, wherein the ~~elementary~~ wires have a diameter between 10 μm and 100 μm.

Claim 27 (Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 20, wherein all the wires of the assembly ~~of elementary wires includes only elementary wires having the same composition~~ are constituted of the fissile material.

Claim 28 (Canceled).

Claim 29 (Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 20, wherein the ~~elementary~~ wires have identical diameters.

Claim 30 (Canceled).

Claim 31 (Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 20, wherein the assembly of ~~elementary~~ wires [[has]] is a braid[[ form]].

Claim 32 (Withdrawn and Currently Amended): ~~Nuclear~~ The high-density fissile material nuclear fuel according to claim 20, wherein the assembly of ~~elementary~~ wires [[has]] is a strand[[ form]].

Claims 33-34 (Canceled).

Claim 35 (Currently Amended): ~~Method~~ A method for producing a nuclear fuel, ~~according to claim 20,~~ comprising:

producing wires, ~~elementary wires having a predetermined composition, most of which are~~ more than half of a number of the wires being wires of fissile material;

producing at least one assembly [[using]] by stranding, braiding or weaving said ~~elementary~~ wires together;

~~placing~~ disposing the assembly in a stainless ductile casing; and

~~shaping~~ deforming the ~~filled~~ stainless ductile casing with the assembly disposed therein so that the stainless ductile casing compresses the wires.

Claim 36 (Currently Amended): ~~Method~~ The method for producing a nuclear fuel according to claim 35, wherein the stainless ductile casing is a tube~~, there is~~ comprising only one assembly, and [[it]] the deforming includes drawing the stainless ductile casing ~~is shaped by drawing~~ through a drawplate or by rolling.

Claim 37 (Currently Amended): ~~Method~~ The method for producing a nuclear fuel according to claim 35, wherein the stainless ductile casing is a tube~~, there is~~ comprising only one assembly, and [[it]] the deforming includes deforming the stainless ductile casing ~~is shaped~~ by roller burnishing.

Claim 38 (Withdrawn and Currently Amended): ~~Method~~ The method according to claim 35, wherein the disposing is realized with the stainless ductile casing having a ~~casing is~~ flattened shape and ~~contains~~ containing plural assemblies placed parallel with respect to one another in a uniform manner, and the ~~shaping of the casing thus filled~~ deforming is performed by pressing or rolling the stainless ductile casing with the plural assemblies therein.

Claim 39 (New): The method according to claim 35, wherein the deforming is performed so that a cross-section shape of the wires is distorted from their original cross-section shape and so that cross-sections of two adjacent wires fit together.